

OUTLOOK

A WEEKLY NEWSPAPER FOR FACULTY AND STAFF AT THE UNIVERSITY OF MARYLAND AT COLLEGE PARK

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A Midpoint Checkup: Five-Year Middle States Self-Study Underway

Recently, 10,000 questionnaires were distributed to members of the campus community. The questionnaires are designed to collect information on people's attitudes about the quality of the learning environment and the state of the university's current academic computing system. This data collection is part of the current five-year periodic checkup on the changes that have taken place at College Park since the last reaccreditation review of the College Park campus in 1985-86.

As a member of the Middle States Association of Colleges and Schools, College Park is required to submit to a series of periodic reviews in order to ensure that it meets or exceeds the academic standards set by the association.

A central part of this review process is the self-study conducted by a broad group of internal subcommittees. The group is appointed by Vice President for Academic Affairs and Provost Robert Dorfman, who heads the self-study process. The group he has appointed is charged with checking on the progress College Park has made since the last self-study and setting the stage for the 1995-96 full-scale decade Middle States review. Dorfman has delegated Jim Leshner, who was the executive secretary for the 1985-86 self-study, to lead the self-study process once again.

Outlook editor Roz Hiebert recently interviewed Leshner on the status of the current review.

Q. Why is this mid-course review so important?

A. The review enables the campus to take stock of the many changes that have taken place over the past five years. It's also expected to identify new or emerging concerns that might need to be looked at in 1995-96.

Q. Have we carried through on recommendations made in the last review?

A. Yes. In retrospect, the 1985-86 review chaired by Brit Kirwan turned out to be a very valuable exercise. A number of changes on the campus can be traced back to it.

Q. Such as?

A. Some examples might be re-vamping the University Studies Program and the General Honors Program; creating new foreign language instructional programs; creating a center for teaching to assist campus faculty improve the quality of teaching; providing more operational autonomy to the campus (in part through giving final authority for tenure and promotion to the



campus and providing for institutional authority to be vested in the president by the 1988 Higher Education Act); formally recognizing the campus' "flagship" status; a new campus periodical which became *Outlook* and a cable TV channel; appointing a faculty ombuds officer—as well as many other changes.

They show that the university not only complied with the official requirements for the reaccreditation process, but also used the review to institute reforms that have changed the character of the institution in perceptible ways.

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Petition Delivered to Board of Regents

On Nov. 19, Campus Senate Chair Gerald Miller delivered a petition with some 9,543 College Park signatures on it to the Board of Regents. System Chancellor Donald Langenberg, in his capacity as chief executive officer of the board, received the petition between regularly scheduled Board of Regents committee meetings in Baltimore.

The petition, which began to be circulated on Oct. 31, asked the Regents to mount "a very vigorous, visible, and well-coordinated public campaign in Annapolis and across Maryland for the restoration of the State's financial support for the University of Maryland System." The signers also pledged to work in partnership with the Regents to make the strongest possible case for the university system.

Miller is pleased with the response and points out that about half of the College Park faculty, one third of the staff and one quarter of the students signed the petition. He will make a full report at the next meeting of the Campus Senate. (Call 405-5805 for information.)

Conference Set on NSF Support For Science and Engineering Education

A conference on National Science Foundation support for science and engineering education will be held Dec. 10 at the University College Conference Center. The conference, sponsored by the Office of Research Administration and Advancement (ORA&A), is open to all members of the University of Maryland System who are interested in obtaining funding for education programs involving science, mathematics or engineering from the kindergarten level through post-doctoral work.

The conference will feature a plenary session by Luthur S. Williams, NSF assistant director for Education and Human Resources, and several other NSF officials, who will discuss current issues in science and engineering education, funding priorities and new program initiatives.

According to Anne S. Geronimo, manager of the College Park Grants Development Unit in ORA&A, NSF

has been appropriated almost \$2.6 billion this fiscal year, an 11 percent increase in funding over last year. Of this amount, science education has received a 44 percent increase to a level of \$465 million.

"There is a big concern that the United States is not producing enough American scientists and engineers," Geronimo says. "American students at all levels are becoming less capable in the sciences. NSF has recognized this and is now providing more resources to help reverse these trends."

NSF also plans a new \$23 million initiative for predoctoral traineeships. Other areas of interest include summer institutes and summer science camps.

"There is a particular interest in helping educators to develop university and public school partnerships," Geronimo says. "We have to

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Members of the Middle States Periodic Review Subcommittees

I. Evaluating the Current Teaching and Learning Environment
Chair, Mahlon Straszheim, Ralph Bennett, Stewart Edelstein, Alex Dragt, Dick Stimpson, Sharon Harley, Avis Cohen, Valerie Woolston.

II. Evaluating the Current Governance/Administrative Structure
Chair, Don Piper, Janet Robertson, Bob Birnbaum, Irv Goldstein, Marsha Guenzler, Sylvia Stewart.

III. Outcomes Assessment
Chair, Kathryn Mohrman, David Sammons, David Segal, Chris Davis, Ann Wylie, Bill Hall, Patrick Cuniff, Bob Lissitz, Nancy Shapiro, Marilyn Brown.

IV. Evaluating the Current Library System
Chair, Theresa Coletti, Victor Korenman, David Grimstead, Marty Gannon, Gary Marchionini, Danuta Nitecki, Anne Macleod.

V. Evaluating Campus Academic Computing
Chair, Sue Clabaugh, Steve Hurtt, Mady Segal, Joy Sircar, John Gentile, Glenn Ricart, John Gannon, Estelle Russek-Cohen, Ron Larsen.

VI. Evaluating the Progress in Diversity and Equity
Chair, Cordell Black, Dario Cortes, Debra Stuart, Sandra Greer, Carol Prier, Deborah Rosenfelt, Sharon Fries-Britt, Mary Cothran.

VII. Maintaining Quality under Reduced Budgets
Chair, Michael Nacht, Dick Chait, Jim Hyatt, Raymond Johnson, Bill Destler, Roger Lewis, Michele Eastman, Judy Olian.

VIII. Steering Committee
Chair, Bob Dorfman, Subcommittee chairs, Jim Leshner, Marilyn Brown, Gail Orgelfinger.

Maryland English Institute Awarded Contract

The Maryland English Institute (MEI) has been awarded a contract by the Institute of Resource Development, a Macro Systems Company, to provide English language training for eight employees of the Saudi Arabian military. The participants will be at MEI from November 4, 1991 through March 31, 1992. For more information, call Leslie Palmer or Lois Kleinhenn Lanier at 405-5185.

Five-Year Self-Study Begins

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Q. Are there other changes in our academic environment that came out of that self-study?

A. The Pease and Greer Committees—both were created as an outgrowth of the self-study review. The reforms that such groups introduced have changed the nature of the curriculum and the character of campus administrative operations. You can see that what Middle States says is ideal—that universities should use these reviews not simply to satisfy some external agency requirements but as an opportunity to rethink their objectives and effectiveness as an educational institution—actually happened here at College Park.

Q. What is the status of the current committee's work?

A. The group has been meeting since last spring and is heading toward a first draft deadline in December. A final report is due to be sent to the president next June.

Q. Are any directions pursued now different from those of the previous self-study?

A. The subcommittees have found that some emerging issues may need to be identified in a preliminary way that perhaps may need to be more seriously addressed in 1995-96. For instance, the committee working on the quality of the learning environment has decided to focus mainly on undergraduate education because that's where the emphasis has been since the 1985-86 review. But the group has begun to think the campus needs to take a serious look at graduate education in the context of the 1995-96 review. We are also heavily into 'learning outcomes assessment,' trying to figure out what approach makes the best sense for UMCP.

Q. What about budget issues?

A. This has complicated the task enormously. We decided that it would be completely unrealistic to approach this review in a business-as-usual way. So a subcommittee was created on an entirely new topic, "Maintaining Quality Under Reduced Budgets." Even the topic itself is problematic because it raises the question, "Can you really maintain quality under reduced budgets or is this in fact a rather dangerous fiction that we should set aside very clearly?"

Q. What is this committee doing?

A. The group is grappling with such issues as how well has the Academic Planning Advisory Committee (APAC) process worked? Are there some ways to economize that have been overlooked? And other such issues.

Q. What other important issues are under consideration?

A. Some committees are mandated by Middle States—the academic computing and libraries committees, the learning outcomes assessment, and progress in diversity and equity.

Q. Has much changed since the 1985-86 review?

A. When you look back at that document, for all its virtues, it's surprisingly out of date. You cannot find any significant discussion of diversity or gender in that document. In five years, the change has been amazing.

Q. Are there any recommendations we did not pursue effectively?

A. One of the hallmarks of the 1985-86 self-study was a rather strident call for institutional autonomy. You can identify a few pockets where we now enjoy a greater degree of operational independence, but it may be that on balance College Park is no more autonomous then it used to be. And we are also probably no closer to a new faculty club than we were five years ago.

Q. What is the next step in the current process?

A. We will complete a draft and in February and in March the document will be distributed broadly to department chairs, the senate and administrative offices.

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OUTLOOK

Outlook is the weekly faculty-staff newspaper serving the College Park campus community.

Kathryn Costello	Vice President for Institutional Advancement
Roz Hiebert	Director of Public Information & Editor
Linda Freeman	Production Editor
Lisa Gregory	Staff Writer
Tom Otwell	Staff Writer
Gary Stephenson	Staff Writer
Fariss Samarrai	Staff Writer
Beth Workman	Staff Writer
Jennifer Bacon	Calendar Editor
Judith Bair	Art Director
John Consoli	Format Designer
Stephen Darrou	Layout & Illustration
Chris Paul	Layout & Illustration
Al Danegger	Photography
Linda Martin	Production
Kerstin Neteler	Production Intern

Letters to the editor, story suggestions, campus information & calendar items are welcome. Please submit all material at least three weeks before the Monday of publication. Send it to Roz Hiebert, Editor Outlook, 2101 Turner Building, through campus mail or to University of Maryland, College Park, MD 20742. Our telephone number is (301) 405-4621. Electronic mail address is outlook@pres.umd.edu. Fax number is (301) 314-9344.

UNIVERSITY OF MARYLAND AT COLLEGE PARK

Big Noon Rally Planned for "Maryland At Risk Day"

Beginning at 11:50 a.m. on Monday, Nov. 25, staff, students and faculty will assemble at several campus locations to march to Reckord Armory for the noon "Maryland at Risk" rally. Designated gathering places are Ellicott Quad, Tawes Plaza, behind South Campus Dining Hall, Hornbake Plaza, Fraternity Row at Route #1, and in front of the Main Administration Building. Also on the day's agenda: Teach In at Stamp Union and classroom discussions. "Maryland at Risk Day" is sponsored by the Campus Senate, the Student Government Association and the Graduate Student Government.

NEWS

Celebration Marks Publication Of Newspaper Guide

A luncheon to celebrate completion of the bibliographic phase of the Maryland Newspaper Project and publication of "A Guide to Newspapers and Newspaper Holdings in Maryland" was hosted at the Rossborough Inn on Nov. 13 by President William E. Kirwan.

The significance of the publication is that for the first time researchers have access to a complete listing of the holdings of all United States newspapers located in 87 Maryland institutions that are open to the public. The guide contains 2,356 titles and more than 5,000 holdings.

In his remarks at the luncheon, Kirwan hailed publication of the guide as "a cooperative effort involving people and organizations throughout Maryland."

He said: "In the present information age, the Maryland Newspaper Project calls our attention to two of the most important and enduring information institutions in history, namely, newspapers and libraries. The second reality about this project is that it results in enormous and direct benefit to the people of Maryland."

Publishers from around the state as well as historians, journalists, and others interested in the development of newspapers in Maryland attended the luncheon.

Guest speaker was James Bready, retired editorial writer for the *Baltimore Evening Sun* who still writes a weekly book column appearing in the *Sunday Sun* and is a frequent contributor of articles to various publications. Bready is the author of *The Home Team*, published in 1958 and updated several times since. The book provides a history of baseball in the city of Baltimore.

At the luncheon, Kirwan gave special recognition to Jeffrey Field,

deputy chair, Office of Preservation of the National Endowment for the Humanities, to Maurice Travillian, assistant supervisor, Maryland State Department of Education, Division of Library Services, and also to Robert Harriman, technical coordinator for the United States Newspaper program at the Library of Congress.

Publication of the guide was the product of a three-year grant-funded effort based in the Maryland Department of the University Libraries at the University of Maryland at College Park. Project Director was Peter Curtis, Curator of Marylandia at the Libraries.

The grant was provided by the National Endowment for the Humanities and the guide was published by the Maryland State Department of Education, Division of Library Development and Services. Copies of the 412-page compilation are available at no charge from the division office located at 200 W. Baltimore St., Baltimore, MD 21201.

With the completion of the bibliographic phase of the project, the preservation phase, or microfilming the newspapers, is now underway at the Maryland State Archives.

The Maryland Newspaper Project is a part of the United States Newspaper Program (USNP) funded by the National Endowment for the Humanities and supported technically by the Library of Congress. The ultimate objective of the USNP is to locate, catalog and preserve, through microfilming, all U.S. newspapers still in existence. By the 21st century, all states will have participated in the USNP and over 300,000 newspapers published since the Nation's beginnings will be identified and noted on a national database available through terminals in over 6,000 libraries.



Historic Maryland Newspaper Nameplates

Progress Continues on Middle States Study

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Q. Will people have a chance to voice their opinions?

A. Absolutely. They should ask department chairs to read copies and express their opinions to the appropriate committee.

Q. Are there other issues we haven't touched on?

A. Personally, I have to say it is difficult for me to write my introductory summary of what's happened over the past five years—seeing the institutional progress that can be demonstrated—without having a rather heavy heart that our progress in academic terms has been put very much at risk by the current financial crisis.

It's as if the state of Maryland over a period of many decades had

assembled a magnificent machine, one that had received so much attention, customizing and fine tuning so that it really was running remarkably well. Then the owner decided not to put any oil in the engine and crashed the whole thing. We have a sense of ourselves as a functioning, academically healthy, successful institution, and the plug has just been unscrewed from our crankcase.

I believe the committees feel strongly that we have kept our side of the bargain with the people of Maryland. We have done what the state wanted us to do. We have gone a long way in self improvement, reform and higher academic standards. To do all of this in the face of this current financial collapse is both disheartening and deeply troubling.

The committee is committed to spending a lot of time and energy completing its charge, but it does so with a somewhat heavy heart, because it senses that the process may not be nearly so useful an enterprise as it was five years ago, because the money just may not be there to support the institution at anywhere near the level that it needs to function appropriately.

But one of the things that will emerge from our report is finding that in many ways the campus has largely succeeded in meeting the objectives it set for itself five years ago. I think we can collectively take a great deal of pride in what the institution has managed to accomplish.

"Ask Your Delegate" at Dec. 4 Q & A Forum

College Park's delegation to the General Assembly—Senator Arthur Dorman and Delegates Pauline Menes, Tim Maloney and Jim Rosapepe—will be on campus on Wednesday, Dec. 4 from 12 to 2 p.m. in Tawes Recital Hall to discuss university budget cuts. Issues to be considered include the proposed "Higher Education Trust Fund" Bill, winning legislative support for the university, and related matters. All faculty, staff and students are invited to come with questions for the legislators. The forum is sponsored by the Campus Senate General Committee on Governmental Affairs. Call 405-5805 for information.

New Program Seeks To Serve Needs of Endangered Species and Humans



Dietz and associates in Brazil, from left to right: Tracking location of Golden Lion Tamarins in jungle by radio; marking tamarins for later identification; baby Golden Lion Tamarins.

The Great Plains Wolf, the Eastern Elk, the Carolina Parakeet, and the Passenger Pigeon have one thing in common—they all have joined the list of animals that have perished during the past 100 years. The common denominator in their disappearances? Humans. While these species could survive natural predators, disease, and all the other checks nature provides to control populations, they could not endure mankind.

Though extinctions often occur naturally, more than 90 percent of all species that have ever lived on this planet are now extinct—and the current high rate of extinction is unprecedented. As the swelling human population crowds into what was once the exclusive domain of innumerable species in its quest for living space, food, and the raw materials of commerce, these species are increasingly competing with humans—and losing. In fact, experts predict that if the current rate of extinction continues during the next 20 years or so, we will witness the destruction of about half of the species currently residing on this planet.

But College Park zoologists James Dietz and David Inouye hope to slow the rate of this terrible destruction.

They have started a program to help deal with the conflict between the needs of an expanding human population and the needs of a diverse environment. Initiated last year, the program is this country's first master's degree program that trains future conservationists not only in science but also in the hard-nosed realities of public policy and economics.

Called the Graduate Program in

Sustainable Development and Conservation Biology, the program is designed to train a new generation of scientists who are knowledgeable in the human, as well as environmental, impacts of conservation.

The program reflects the pragmatic realism of its creators. It also reflects their awareness that the needs of humans cannot be ignored when attempting to protect threatened species. While he remains a fervent crusader for preserving nature, Dietz is no starry-eyed idealist. One part visionary, one part pragmatist, Dietz cautions that the zeal exhibited by many conservationists seeking to save endangered species should not blind them to the needs of people. "An ivory tower approach to environmental conservation is doomed to failure," he says. "Scientists alone are not capable of solving conservation problems. What is needed is a multidisciplinary approach that takes into consideration each country's unique economic and political factors."

Dietz is quick to point out that for nations struggling to feed their people or maintain their economy, the issue of preserving endangered species is likely to rank low as a national priority. "Too often, the needs or concerns of local residents or governments are overlooked by those seeking to preserve endangered species," Dietz says.

But by involving experts from various fields, both scientific and humanistic, the requirements of man and animals can be considered and balanced. The College Park program was designed expressly to accomplish that goal.

The program, which was initiated this year, requires 45 total credits including completion of core courses in the areas of ecology and conservation biology, resource economics, public policy, and multidisciplinary problem-solving. Also required is a thesis that analyzes a conservation or development project from the viewpoint of biological conservation and economic benefits, and offers policy recommendations. By structuring the graduate program this way, students are trained to consider conservation problems from a variety of perspectives.

So far, 19 students have enrolled in the program, which will graduate its first class of conservation

scientists in 1992.

Dietz first became interested in conservation biology in 1983. As a post-doctoral student in Brazil studying the evolution of social organization of Golden Lion Tamarins—small monkeys that live in that country—Dietz made the unhappy discovery that there soon might not be enough tamarins left alive to study. At that time there were only about 450 tamarins remaining in the wild and only one protected preserve in Brazil. And those numbers were declining.

"We found that the tamarins remaining in the wild were in small forest patches separated from their neighbors by cattle pastures they could never cross," Dietz explained.

The animals were threatened not only by the destruction of their natural habitat, but also by the inbreeding brought about by population separation.

Dietz realized that the problem of preserving the tamarins and other endangered species would involve help from a variety of disciplines, including economics, sociology, public policy and education. This led Dietz to begin formulating his ideas on the need to train future conservation scientists in these and other specialties.

Dietz also realized that College Park would be a critical factor in attaining his ambitious goals. "Universities such as ours play a critical role through the training of professionals in diverse fields relevant to development and conservation," Dietz notes. "The same rigor applied to research efforts in other areas of science must also be invested in conservation. However, most scientists become specialists in a single subject and their academic training lacks the multidisciplinary breadth necessary to enable them to understand and interact with specialists in other areas. Traditional academic training also fails to cultivate a problem-solving team approach that is essential for working effectively on conservation and development issues."

Dietz' approach to bioconservation is now receiving its second acid test in the steamy jungles of eastern Brazil. There, Dietz and his colleagues from the National Zoo are beginning efforts to forestall extinction of golden-headed lion tamarins, another species of monkey found further south in Brazil.

Dietz remains dedicated to helping find answers to the conservation challenges of the present and to those of the future. In between his trips to Brazil to help save species facing the imminent threat of extinction, Dietz hopes that the future conservationists that will emerge from the College Park program will leave with the skills, attitudes, and knowledge necessary to help keep the list of species that have become extinct from growing too much longer.

Gary M. Stephenson

Driskell Film to be Shown

"Hidden Heritage: The Roots of Black American Painting," a 55-minute film narrated by David Driskell, professor of art, will be shown at 5 p.m. on Dec. 2 in Room 2203 of the Art-Sociology Building. A reception will follow. Produced by the Arts Council of Great Britain, the film tells the story of African American art and its role in African American culture from the late 1700s through the 1930s. The event is free and open to the public. For more information, contact Stephanie Pogue at 405-2105.

ARTS

The Stuff That Collier's Books and Poems are Made Of

Beach towns, childhood memories, deep sea dives. These are the things that Michael Collier's poems and books are made of. Collier, director of the English department's graduate Creative Writing Program, most recently had "Mission Boulevard," a poem about a Southern California beach town in the late 1960s, published in the November 1991 issue of *The Atlantic*.

Several other projects are underway or planned, including a third book of original poems. Still untitled, the book will reflect on Collier's childhood memories of people he grew up with in a Phoenix, Arizona neighborhood. Summer 1992 is the tentative completion date. Collier's first book of poems, *The Clasp and Other Poems*, was published in 1986; his second book, *The Folded Heart*, was published in 1989.

Also underway is a critical anthology of poets published in the Wesleyan University Press Poetry Series. Collier says the anthology, scheduled for completion in December 1992, will demonstrate the importance of these poets' influence on contemporary American poetry of the last 30 years.

Collier's most recent material-making experience occurred in September, when he joined a group of about 15 scientists on a deep sea dive to the Juan de Fuca Ridge, 250 miles off the coast of Washington state. He was invited by John Delaney, a long-time acquaintance who is a geologist at the University of Washington and the expedition's chief scientist.

Water plays a large part in Collier's life. He swims competitively with the university's Masters Swim Team and his sister was an Olympic diver. Collier also points to his mentor, Pulitzer-prize winning poet William Meredith, when explaining his interest in the water. One of Meredith's poems, titled "The Wreck of the Thresher," is about a submarine disaster and was influential on Collier as an undergraduate student.

According to Collier, Delaney has been making dives to the Juan de Fuca Ridge since he located hydrothermal vents there in 1984. Collier says he was invited because Delaney believes the more perspectives he can get on the vents, the more he'll learn. Collier will provide a fresh perspective, as well as Delaney's first non-scientific perspective, in his planned book on the experience.

Collier explains hydrothermal vents in a non-scientific manner: sea water circulates through cracks in the ocean floor and is heated by volcanic magma that lies beneath the earth's crust. This fluid then vents like hot springs along the mid-ocean ridges where the earth's plates meet. When released, the fluid can reach temperatures as high as 700° F, and contains metals and minerals that form into chimneys, spires and flanges. "As the water comes out, it shimmers," says Collier. "Further up it hits colder sea water and changes to black smoke, which precipitates the metals and minerals that form these sparkling, colorful sulfide structures."

Surrounding sea water has a temperature of 36° F. In the area between the temperature gradient lives "a whole world of biology no one knew about 14 years ago," says Collier. Approximately 180 species of animal life has been discovered in hydrothermal vent areas around the world since 1977, he says.

"Being at the bottom of the sea is really like being on another planet," says Collier. "The landscape is so far outside human experience that we have no language for it. As a result, it feels devoid of human emotion, almost beyond understanding. But at the same time, it feels absolutely fresh, untouched and just discovered."

Alvin, a 28-foot submarine whose seven-foot titanium sphere holds three people, is owned by the Office of Naval Research, and was Collier's home for the dive. Alvin's mother ship is the Atlantis II, a Woods Hole Oceanographic Institute vessel.

Collier and the others, including biologists, chemists, seismologists, and geologists were on Atlantis II for three weeks, and took turns diving. A pilot and a chemist accompanied Collier during his seven-hour dive. Although Alvin allows only a six-inch port for each person to view the sights from, Collier says he could actually see quite a bit thanks to lights and video monitors.

"I was completely absorbed," says Collier. "I didn't want to go back up, except to talk about it."

Beth Workman



Michael Collier

Miles Hoffman Takes Talents to Radio

What does "allegro" mean? Why is "baroque" called "baroque"? For answers to these and other questions about musical terms, tune in to WETA-FM for "Coming to Terms," featuring the Music Department's viola teacher, Miles Hoffman.

On Tuesdays at 7:35 p.m., Hoffman helps music-loving non-musicians understand music terminology in a "friendly, non-stuffy" way. For more than two years his commentary has been part of National Public Radio's (NPR) *Performance Today*, a program hosted by Martin Goldsmith. *Performance Today* is broadcast on 130 stations nationwide, but only recently joined WETA's roster. WETA can be found at 90.9 FM on the radio dial.

Hoffman says that if letters are an indication of the "jargon busting" program's popularity, then it's a success.

Also successful are the American Chamber Players, a group of seven musicians headed by Hoffman. Since Hoffman, a former National Symphony member, organized the group in 1985, it has



Miles Hoffman

toured the country and received rave reviews along the way.

"They have established standards of chamber music performance equal to any in the world," said the *Washington Post*. The *Washington Post* also called the group

"An extraordinarily talented group who play beautifully together..." and the *New York Times* said, "...The American Chamber Players in fact do excellent work."

The American Chamber Players were formed from a core group of musicians involved in the Library of Congress Summer Chamber Festival, an event founded by Hoffman in 1982. The group has recently released its fourth compact disc (CD) on the Koch International Classics label. More CDs are planned.

Hoffman's viola playing is world-class, yet he is most proud of pieces he has commissioned from composers. "I think the greatest achievement for a performer is to somehow help contribute to the composition of music that will last," says the music professor.

In the near future, Hoffman's talent can be enjoyed during a Special Faculty Recital on Dec. 8. Featured with Hoffman will be Robert McCoy, pianist. The recital will be held at 7:30 p.m. in Tawes Recital Hall, and is free and open to the public.

RESEARCH



Owen E. Thompson



John R. Townshend



Robert D. Hudson



Christmas Concerts to Feature Old Favorites

On Saturday, Dec. 7 at 8 p.m. and Sunday, Dec. 8 at 4 p.m., the University of Maryland Chorus conducted by Paul Traver will present its annual Christmas Concerts in the Memorial Chapel. The program includes Christmas music for chorus and brass featuring works from the 17th and 19th centuries. The audience will be invited to join the chorus in singing carol favorites. Tickets are \$8 standard admission; \$5 seniors, students, faculty and staff (with I.D.); and \$3 children. Call 405-5568 for info.

College Park "Pathfinders" Advise NASA and NOAA

Three College Park researchers, Owen E. Thompson, John R. Townshend and Robert D. Hudson, are "pathfinders" by the best definition of the term. Two of these scientists, Thompson and Townshend, are pathfinders according to the definition of NASA and NOAA: they are members of an initiative to define the correct procedures for re-analyzing 12 years of archived environmental satellite data to assess evidence of climate and global change. Hudson is at work on another project: monitoring global ozone using the Upper Atmosphere Research Satellite (UARS) recently launched by a space shuttle.

According to Thompson, professor of meteorology, three international Pathfinder Scientific Working Groups have been appointed by NASA and NOAA to advise these agencies of the best scientific and technical procedures to use for interpreting evidence of climate and global change from each of three environmental satellite technologies. Thompson chairs one of these groups, Townshend, professor and chair of the Department of Geography, chairs another.

Thompson's group is looking at ways to analyze 12 years of data from the TIROS Operational Vertical Sounder, an observational

instrument that measures infrared and microwave spectral radiance upwelling from the Earth-atmosphere system. The spectral wavelengths of the radiation observed are sensitive to absorption and emission of radiation by atmospheric carbon dioxide, water vapor, ozone and the liquid water content of clouds.

"From such data, one may determine such things as the vertical profile of temperature and moisture around the globe which are variables of primary importance to circulations and energy transports in the atmosphere," Thompson says. "The unraveling of the radiance observations into information on temperature and moisture is a mathematically ill-posed inverse integral problem."

Thompson says this is the mathematician's way of saying that the solution to the satellite sounding problem is not unique, and two or more very different solutions, relating to atmospheric temperature and moisture structure may be calculated which agree with the observed upwelling radiation data. Therefore, it was necessary for NASA and NOAA to create an advisory committee to determine the best ways in which to interpret the data.

Townshend is chairing the

NASA/NOAA committee that is looking for optimum ways to evaluate data from the Advanced Very High Resolution Radiometer. The AVHRR is a radiometric instrument that is capable of scanning a field of view of the Earth's surface in each of several spectral radiational wavelength intervals (visible and infrared) with high horizontal resolution.

The objective of the radiometer is to determine land and sea surface temperature; characteristics of the Earth's surface, ice pack, land-use characteristics; and changes in surface characteristics owing to human actions such as deforestation, urbanization, and changes in agricultural practices. The AVHRR also provides data on surface changes due to droughts, floods, beach erosion and other factors.

Hudson, chair of the Department of Meteorology, is an international leader or "pathfinder" in techniques to observe atmospheric ozone and other trace gases high in the atmosphere using satellite technology. The Upper Atmosphere Research Satellite launched by a space shuttle in September carries an instrument called the Total Ozone Mapping Spectrometer, which Hudson helped design during prior positions at NASA.

Nature's Poisons Studied by College Park Researchers

While the personal and environmental threats of industrial toxins have captured the attention of the media and the public, less attention has focused on natural toxins. This could be a potentially dangerous oversight, say College Park researchers, because it seems Mother Nature is pretty adept at concocting her own poisons.

Ironically, the same fungi that can produce life-saving antibiotics such as penicillin also can spawn deadly toxins. These poisons, called mycotoxins, can be produced by most fungi, especially molds, and are not only poisonous, but some may cause cancer.

"A number of mycotoxins have been identified, but the most notorious are 'aflatoxins,' which occur naturally in a number of products, including peanut butter," explains George Bean, associate dean of the College of Agriculture and professor of botany. "Scientists are especially concerned about the presence of aflatoxins in food and animal feeds because they are a highly carcinogenic compound."

To understand mycotoxins and aflatoxins better, Bean has spent the past 20 years studying these dangerous toxins, trying to understand why they are produced, what conditions enhance their production, and how best to prevent them

from contaminating human and animal foods and feeds.

In one recent study, Bean examined the effects of cooking methods on the presence of aflatoxins in rice from Sri Lanka. He found that the commercial method of preparing rice, which involves presoaking the rice with the husk intact prior to cooking and milling, results in fermentation which provides ideal conditions for the production of aflatoxins. The traditional "cottage" methods of preparing rice, however, appears to reduce aflatoxin growth because no steeping is involved.

The problem of natural toxins contaminating foods is not confined to developing Asiatic countries like Sri Lanka.

At a recent international symposium on mycotoxins in Mexico City, Bean presented data suggesting that mycotoxins in corn pose a potentially serious health problem in many Latin American countries. "Mycotoxins now recognize that mycotoxin occurrences are not rare, but can occur wherever the organisms producing these toxins are able to grow," Bean pointed out. He noted also that mycotoxins have been reported in wheat, soybeans and corn in Canada and the United States.

This increasing concern over mycotoxins resulted in Bean's being asked to hold a symposium on campus last March for plant and animal biologists from around the mid-Atlantic region to hear Bean and three other College Park experts discuss the natural occurrence of toxins that are often consumed by humans and animals. Entitled *Natural Poisons in our Food and Feed Stuffs, an Evening of Mycotoxicology*, the symposium featured presentations by Bean, who spoke on the involvement of mycotoxins in the pathogenicity of microorganisms, as well as presentations by Mary Matossian from the Department of History; Bruce Jarvis from the Department of Chemistry and Biochemistry; and Scott Angle, from the Agronomy Department.

At the meeting, Bean noted that his research suggests that the mold fungi that produce mycotoxins may use these same chemicals to help attack plant tissue. Matossian reported that outbreaks of mycotoxins in colonial New England had an influence on demographic characteristics of that area. Jarvis talked about the origin of natural toxins in Brazilian plants, and Angle discussed what happens in the environment of mycotoxins.

Gary M. Stephenson

Miss Black Unity Pageant Set

Nyumburu Cultural Center will present its 14th annual Miss Black Unity Pageant with the theme "14 K Gold," Sat., Dec. 7 at 7:30 p.m. in Tawes Theatre. Admission is \$6 in advance and \$8 at the door. Tickets can be purchased in Room 3125, South Campus Dining Hall. For more information, call 314-7758.

When the Weather Outside Is Frightful

Armed with hundreds of thousands of dollars worth of equipment and tons of sand, salt and de-icer, physical plant crews are ready to launch an aggressive counter-attack when Old Man Winter strikes.

Included in the arsenal are plows, loaders, tractors, snow blowers, power brooms and shovels and several hundred well-trained campus employees who will operate them.

But, with 160 acres of parking lots, 11 miles of roads, 23 miles of sidewalks and thousands of exterior steps, the worst weather has the potential to challenge and sometimes overwhelm the campus' snow removal capabilities.

When this happens, the Vice President for Academic Affairs will determine whether the campus is open. His decision reflects a variety of considerations including the observed condition of the campus, information about roads leading to it, decisions made by local schools and governments, and the weather forecast.

Three narrative messages are used.

- The campus is open.
- The campus is closed.
- The campus is open at (time).

During each day of a weather emergency, the status of the campus is communicated to area radio and television stations prior to 6 a.m. by the Office of Public Information to allow these stations to

put the information on their 6 a.m. news programs. All employees and students should listen for these broadcasts.

When the campus is open, it is open for everyone. When the campus is closed, it is closed for all employees and students except those employees designated as "essential." Unless they have been designated by their departments as "essential personnel," employees are urged not to come to campus.

If the campus is closed, it is likely that its roads and sidewalks are unsafe or impassable. Automobile traffic hinders snow removal efficiency and effectiveness.

During a snowfall, snow removal priorities are as follows:

1. Keep all major campus roads open.
2. Assure access to emergency service agencies such as the Health Center, Firehouse and Campus Police.
3. Assure access to and from residence halls, dining halls, graduate apartments and Greek houses when students are in residence.
4. Provide access to specified 24-hour-a-day facilities including the Computer Science Center, the Academic Computing Center and animal research facilities.
5. Open campus parking lots starting with lots 1, 11a, V1, K1 and G3.
6. Open main campus sidewalks.
7. Open feeder sidewalks and shovel exterior steps.

After a heavy snowfall, when the campus is open, returning employees can expect to confront two problems—fewer available spaces in parking lots and icy conditions. Hauling away snow plowed from 15,000 parking spaces would be very costly and far beyond the university's budget for snow removal. Therefore the snow has to be mounded up in some parking spaces and left to melt (and possibly refreeze nightly). These icy spots will be sanded daily but they could remain quite slippery because the sand is quickly removed by car and pedestrian traffic.

Physical Plant offers the following wintertime tips.

If you notice some icy patches that have not been sanded or salted, call Work Control (x52222) or Grounds Division (x53320) and a crew will be dispatched as soon as possible.

The first three or four days after a snowfall are typically the most treacherous. As your confidence begins to return, you are not as alert to those icy patches underfoot. The patch you fall on today might not have been there yesterday. It could have formed overnight from melting snow. Don't take shortcuts in icy weather. Stick to the main open roads and sidewalks.

Tom Otwell



Dec. 10 Conference to Discuss Science Education Grants

continued from page 1

get kids interested in science at an early age and encourage them in the various scientific fields throughout their school years, including graduate and post-graduate education. The increased funding from NSF for these activities should help catapult American students into the scientific and technological world of the 21st Century."

Geronimo emphasizes that the conference is free and open to anyone in the university community who is seeking funding for science education, including areas of social science and public policy. Funds are available now, and Geronimo recommends that people attend the conference and begin preparing proposals as soon as possible.

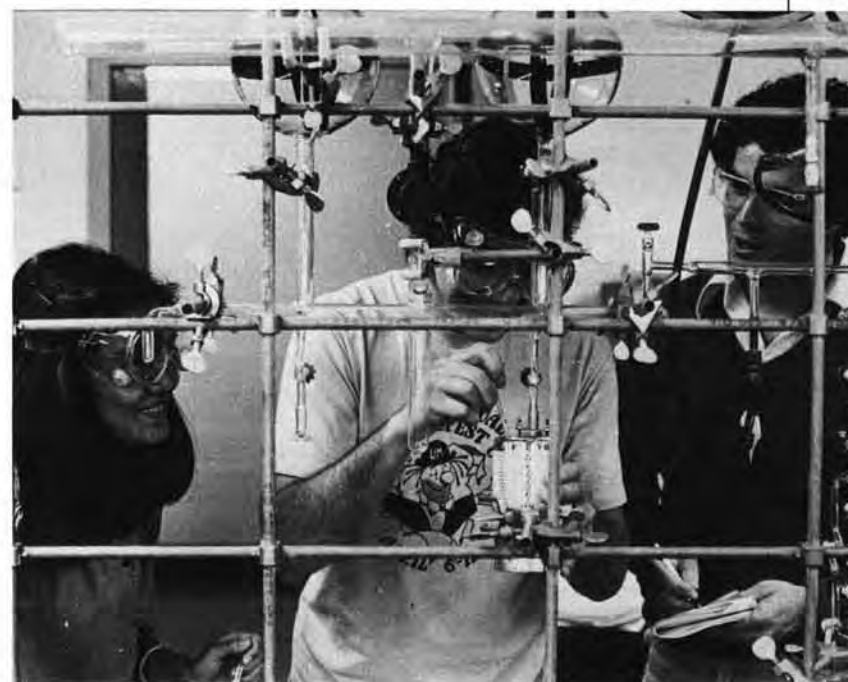
"NSF officials will answer the questions of attendees on an individual basis and will provide information on grant proposal writing and submission," she says.

Jacob K. Goldhaber, acting dean of Graduate Studies and Research, adds: "The generally perceived

bifurcation between research and teaching is false: they go hand in hand. As a research university, we have an obligation not only to excel in the production of knowledge, but also to excel in its transmission. The NSF received a substantial increment for the support of science education programs. I hope faculty on this campus will take full advantage of the opportunities presented."

The conference is the second in a series on grants development sponsored by ORA&A-Grants Development Unit of the Office of Graduate Studies and Research. Registration is on a first come first served basis. For further information about the conference agenda and for a registration form, call Geronimo at 405-4178.

Fariss Samarrai



CALENDAR

Improvisation Workshop Invites Participants to "Try It"

Improvisations Unlimited, the critically-acclaimed dance ensemble in residence at the university, will host a "Try It!" workshop on Thursday, Dec. 5 at 7:30 p.m. in the Dorothy Madden Studio/Theater. The workshop is designed to provide participants an opportunity to work with company members in improvisational movement exercises and explorations. No experience is necessary. Admission is \$2, and participants are asked to wear comfortable, loose-fitting clothing. For information and to register, call 405-3190.



NOVEMBER 25-DECEMBER 10

Attention: December 2 Academic Planning Advisory Committee (APAC) Open Hearing for the Department of Hearing and Speech Sciences, concerning possible downsizing or elimination of the department, noon-2 p.m., 2102 Shoemaker. Call 5-6820 for info.

25 MONDAY

Art Gallery Exhibition: "Dreams, Lies, and Exaggerations: Photomontage in America," featuring 122 works of art, including magazine lay-outs, book jackets, brochures, as well as fine art photography, Oct. 21-Dec. 20, The Art Gallery. Call 5-2763 for info.

Systems Research Center Colloquium: "Bifurcations in the Double Spherical Pendulum," Jerrold E. Marsden, U. of California at Berkeley, 10-11 a.m., 1100 ITV Bldg. Call 5-6634 for info.

Horticulture Seminar: "Winter Protection of Container-Grown Nursery Crops," Joan Feely, Horticulture, 4 p.m., 0128B Holzappel. Call 5-4336 for info.

Entomology Colloquium: "Ixodes dammini and Lyme Disease in Maryland," Felix Amerasinghe, Entomology, 4 p.m., 0200 Symons Hall. Call 5-3911 for info.

Space Science Seminar: "Solar Wind Composition: First Results from Ulysses," Toni Galvin, 4:30 p.m., 1113 Computer and Space Sciences. Call 5-6226 for info.

26 TUESDAY

Ecology, Evolution and Behavior Colloquium: "No Sex, No Lies, But Good Slides," Isabel Braga, Zoology, noon, 1208 Zoo/psych. Call 5-6949 for info.

Physics Colloquium: "Learning Patterns in Complex Data," Norman Packard, U. of Illinois, 4 p.m.; tea, 3:30 p.m., 1410 Physics. Call 5-5953 for info.

Horticulture Seminar: "Morphological and Physiological Responses of Bottomland and Riparian Tree Species to Water Stress," Lenore J. Nash, Horticulture, 4 p.m., 0128B Holzappel. Call 5-4336 for info.

Dingman Center for Entrepreneurship Seminar: "The New Rules in Entrepreneurial Finance: Financial Survival and Growth in a Recession," 6-9 p.m., Pooks Hill Marriott, Bethesda. Call 5-2151 for info.

Men's Basketball vs. Maryland-Eastern Shore, 8 p.m., Cole Field House. Call 4-7070 for info.

27 WEDNESDAY

End of Day: Campus closes for Thanksgiving break.

28 THURSDAY

Happy Thanksgiving

30 SATURDAY

Concert Society at Maryland: "Thanksgiving Art-Song Celebration," Judith Nelson, soprano; Elaine Thornburgh, forte piano and Randall Wong, soprano, 8 p.m.; free seminar, 6:30 p.m., Center of Adult Education, \$17 standard admission, \$15.30 faculty and staff, \$14.50 seniors and \$5 students. Call 80-4240 for info and reservations.

Men's Basketball vs. American University, 1 p.m., Cole Field House. Call 4-7070 for info.

2 MONDAY

Academic Planning Advisory Committee (APAC) Open Hearing for the Department of Hearing and Speech Sciences, concerning possible downsizing or elimination of the department, noon-2 p.m., 2102 Shoemaker. Call 5-6820 for info.

Horticulture Seminar: "Morphological and Physiological Responses of Bottomland and Riparian Tree Species to Water Stress," Lenore J. Nash, graduate research assistant, Horticulture, 4 p.m., 0128B Holzappel. Call 5-4336 for info.

Entomology Colloquium: "Integrated Pest Management in Crystal City Office Parks with Emphasis on Douglas Fir and Spruce Problems," Tina MacIntyre, Entomology, 4 p.m., 0200 Symons Hall. Call 5-3911 for info.

3 TUESDAY

Ecology, Evolution and Behavior Colloquium: "Sex, Flies and Videotapes: Prezygotic Sexual Selection in Stalk-eyed Flies," Pat Lorch, Zoology, noon, 1208 Zoo/psych. Call 5-6942 for info.

Physics Colloquium: "Knot Theory and Statistical Mechanics," Lewis H. Kauffman, Mathematics, U. of Illinois, 4 p.m.; tea, 3:30 p.m., 1410 Physics. Call 5-5953 for info.

Center for Construction Engineering and Management Lecture: "Organized Labor in Construction in the 1990s: Challenges and Opportunities," Edward J. Carlucci, president, Sheet Metal Workers' International Association, 6-7 p.m., Judith Resnick Lecture Hall, Engineering Bldg. Call 5-1940 for info.

Twentieth Century Concerts: Thomas Moore, pianist, 8 p.m., Tawes Recital Hall. Call 5-5548 for info.

4 WEDNESDAY

Counseling Center Research and Development Meeting: "Update on Eating Disorders," Brenda Sigall, Counseling Center, noon-1 p.m., 0106-0114 Shoemaker. Call 4-7691 for info.

Molecular and Cell Biology Seminar: "Biochemistry of Genetic Recombination in *Saccharomyces cerevisiae*," Richard Kolodner, Dana-Farber Cancer Institute, Boston, MA, 12:05 p.m., 1208 Zoo/psych. Call 5-6991 for info.

Jazz Piano/Vocal Workshop Performance, 7:30 p.m., Tawes Recital Hall. Call 5-5548 for info.

United Campus Ministry Interdenominational Advent Service, 7:30 p.m., Memorial Chapel. Call 5-8450 for info.

5 THURSDAY

Meteorology Seminar: "Climate and Dynamical Implications of the Antarctic Ozone Hole," J. Mahlman, Geophysical Fluid Dynamics Lab, Princeton, NJ, 3:30 p.m., 2114 Computer and Space Sciences; refreshments, 3 p.m. Call 5-5392 for info.

Systems Research Center Colloquium: "Intensity-Based Modeling of Discrete Event Dynamic Systems," J. George Shanthikumar, U. of California at

Berkeley, 3-4 p.m., reception to follow, 1100 ITV Bldg. Call 5-6634 for info.

Improvisation "Try It" Workshop, Improvisations Unlimited, Dorothy Madden Studio/Theater. Call 5-3190 for info.

6 FRIDAY

Neuroscience Colloquium: "Sensorineural Deafness and Self Repair in Hair Cell Epithelia," Jeffrey Corwin, U. of Virginia, noon-1 p.m., 1208 Zoo/psych. Call 5-7228 for info.

Mental Health Service Lunch 'n Learn Seminar: "Non-Events: Nothing Happened but Everything Changed," Nancy Schlossberg, Counseling and Personnel Services, 1-2 p.m., 3100E Health Center. Call 4-8106 for info.

First National Bank of Maryland Research Colloquium in Finance: "Industry Level Pressures to Restructuring," Margaret Blair, Brookings Institute, 1-2:30 p.m., 2102 Tydings. Call 5-2256 for info.

Mathematics Colloquium: "What is a Mathematician Like You Doing in a Place Like That?," Leon Seitelman, United Technologies, Pratt and Whitney Aircraft, 3 p.m., 3206 Math Building. Call 5-5062 for info.

7 SATURDAY

Men's Basketball vs. West Virginia, 1 p.m., Cole Field House. Call 4-7070 for info.

Faculty Club Holiday Dinner, (to precede Maryland Chorus Christmas Concert) including cash bar with hors d'oeuvres and egg nog, seated dinner \$19.50, 6-7:30 p.m., Rossborough Inn. Call 4-8015 for info.

Nyumburu Cultural Center Miss Black Unity Pageant: "14 Karat Gold," 7:30 p.m., Tawes Theatre. Tickets are \$6 in advance; \$8 at the door, and may be purchased at 3125 South Campus Dining Hall. Call 4-7758 for info.

Maryland Chorus Christmas Concert, Paul Traver, director, 8 p.m., Memorial Chapel. Call 5-5571 for info.

8 SUNDAY

Maryland Chorus Christmas Concert, Paul Traver, director, 4 p.m., Memorial Chapel. Call 5-5571 for info.

Special Faculty Recital, Miles Hoffman, viola; Robert McCoy, piano, 7:30 p.m., Tawes Recital Hall. Call 5-5548 for info.

9 MONDAY

Horticulture Seminar: "The Challenge of Developing a Landscape Contracting Program," Cameron Man, Mississippi State U., 4 p.m., 0128B Holzappel. Call 5-4336 for info.

Computer Science at College Park Colloquium: "Fine-Grain vs. Coarse-Grain Parallel Computing," H.T. Kung, Carnegie-Mellon U., 4 p.m., 0111 Classroom Bldg. Call 5-2737 for info.

Maryland Bands Showcase: Symphonic Wind Ensemble, Jazz, Concert and Marching Bands; John Wakefield, George Ross and Richmond Sparks, conductors, 8 p.m., Tawes Theatre. Call 5-5542 for info.



Judith Nelson, accomplished singer of Baroque music and acclaimed harpsichordist and fortepianist Elaine Thornburgh will accompany Randall Wong, the world's only accomplished male soprano, for an evening of "Thanksgiving Art-Song Celebration," presented by the Concert Society at Maryland on Nov. 30 at 8 p.m. See listing for details.



10 TUESDAY

Ecology, Evolution and Behavior Colloquium: "Evolution of Lekking in Manakins," Mercedes Foster, Smithsonian Institution, noon, 1208 Zoo/psych. Call 5-6942 for info.

Center for International Development and Conflict Management "Brown-Bag" Seminar: "Ethnicity, Development and Human Rights in Guatemala," Nancie Gonzalez, 12:30 p.m. (bring lunch), second floor, Mill Bldg. Call 4-7703 for info.

Center for Teaching Excellence "Conversations About Teaching": "Student Concerns and Perspectives," 12:30-2 p.m., Maryland Room, Marie Mount. Call 5-3154 for info.

Music Department Student Honors Recital, 12:30 p.m., Tawes Recital Hall. Call 5-5548 for info.

University Chorus Christmas Concert, Roger Folstrom, director, 8 p.m., Memorial Chapel. Call 5-5548 for info.

General Physics Colloquium: "Advances in Helioseismology," Ken Libbrecht, Astrophysics, California Institute of Technology, 4 p.m.; tea, 3:30 p.m., 1410 Physics. Call 5-5953 for info.

* Admission charged for this event. All others are free.

NOTE: Outlook will not be published Dec. 2. The next issue (and the last of the fall semester) will be out Dec. 9.

